



## Health risks associated with drinking water in a context of climate change in France: A review of surveillance requirements

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### Abstract:

It is widely recognized that climate change will impact upon human health in a variety of ways. Assessing these impacts and identifying adaptation opportunities requires appropriate monitoring. To identify the need for reinforced surveillance in metropolitan France, we defined a conceptual framework of how climate change could impact upon health risks in relation to drinking water. Three types of climate change-related impacts were identified: changes in raw water quality, changes in water treatment processes and changes in human determinants of exposure in relation to consumers' behaviour. This framework was applied to existing risks and exposure situations in France. An increase in the health burden attributable to drinking water intake is expected due to increased exposure to faecal pathogens, disinfection by-products and cyanobacteria as a result of a combination of natural, technical and human factors. Current sources of health and water data should satisfy surveillance requirements. However, we believe that the creation of a sustainable database comprising behavioural and water management data would be valuable in following and understanding emerging trends.

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### Resource Description

#### Early Warning System: ☒

resource focus on systems used to warn populations of high temperatures, extreme weather, or other elements of climate change to prevent harm to health

A focus of content

#### Exposure : ☒

weather or climate related pathway by which climate change affects health

Food/Water Quality

**Food/Water Quality:** Biotoxin/Algal Bloom, Chemical, Pathogen

#### Geographic Feature: ☒

resource focuses on specific type of geography

None or Unspecified

# Climate Change and Human Health Literature Portal

## **Geographic Location:**

resource focuses on specific location

Non-United States

**Non-United States:** Europe

**European Region/Country:** European Country

**Other European Country :** France

## **Health Impact:**

specification of health effect or disease related to climate change exposure

Infectious Disease

**Infectious Disease:** Foodborne/Waterborne Disease

**Foodborne/Waterborne Disease:** General Foodborne/Waterborne Disease, Marine Toxin Syndrome

## **Mitigation/Adaptation:**

mitigation or adaptation strategy is a focus of resource

Adaptation

## **Resource Type:**

format or standard characteristic of resource

Review

## **Timescale:**

time period studied

Time Scale Unspecified